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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

0.03/012119 A3

(54) Title: NUCLEIC ACID AMPLIFICATION METHOD

(57) Abstract: A nucleic acid amplification method, and probes for use within the method are described.

International application No.

		PCT/SE 02,	/01378	
A. CLASS	SIFICATION OF SUBJECT MATTER			
	C12Q 1/68 o International Patent Classification (IPC) or to both n	ational classification and IPC		
B. FIELD	S SEARCHED			
Minimum d	ocumentation searched (classification system followed b	y classification symbols)		
IPC7: (C12Q			
Documentar	tion searched other than minimum documentation to the	e extent that such documents are include	d in the fields searched	
SE,DK,F	FI,NO classes as above			
Electronic d	ata base consulted during the international search (nam	e of data base and, where practicable, see	erch terms used)	
C. DOCU	MENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where ap	propriate of the relevant passages	Relevant to claim No.	
			Relevant to claim 140.	
. X	Nature Genetics, Volume 19, 1990 Paul M. Lizardi et al: "Mut- single-molecule counting us- rolling-circle amplification 231, figure 6	ation detection and ing isothermal	1-3,5,8,10, 12,28-34	
	, minus			
X	US 5854033 A (LIZARDI), 29 Dece (29.12.98), column 11, line	mber 1998 45 - line 64	1-3,5,8,10, 12,28-34	
-	No. 100		0.00	
Х	WO 0188190 A2 (MOLECULAR STAGING 22 November 2001 (22.11.01)	S, INC.), , claim 31	1-3,5,8,10, 12,28-34	
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X Furthe	er documents are listed in the continuation of Box	C. X See patent family ann	ex.	
* Special	categories of cited documents:	"T" later document published after the i		
to be of	nt defining the general state of the art which is not considered particular relevance upplication or patent but published on or after the international	date and not in conflict with the ap the principle or theory underlying the	dication but cited to understand	
"L" docume	nt which may throw doubts on priority claim(s) or which is establish the publication date of another citation or other	considered novel or cannot be considered to involve an inventive step when the document is taken alone		
"O" docume means	reason (as specified) nt referring to an oral disclosure, use, exhibition or other	"Y" document of particular relevance: it considered to involve an inventive s combined with one or more other a being obvious to a person skilled in	tep when the document is such documents, such combination	
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Date of the	actual completion of the international search	Date of mailing of the international	scarch report	
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Box 5055,	Patent Office S-102 42 STOCKHOLM No. +46 8 666 02 86	Patrick Andersson/EÖ Telephone No. + 46 8 782 25 00		
	A/210 (second sheet) (tuly 1998)			

Form PCT/ISA/210 (second sheet) (July 1998)

International application No.
PCT/SE 02/01378

		PCT/SE 02/0	13/0
	ation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the rele	evant passages	Relevant to claim No.
X .	WO 0006778 A1 (THE PUPLIC HEALTH RESEARCH INSTITUTE OF THE CITY OF THE NEW YORK, IN 10 February 2000 (10.02.00), claims 19,2	1-3,5,8,10, 12,28-34	
A	US 6221603 B1 (MAHTANI), 24 April 2001 (24.04	1.01)	1-3,5,8,10, 12,28-34
			
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International application No. PCT/SE02/01378

Box I	Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This inter	national search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1.	Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2.	Claims Nos.: because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3.	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Вох П	Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
	mational Searching Authority found multiple inventions in this international application, as follows:
1.	As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2.	As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.	As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4.	No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark	The additional search fees were accompanied by the applicant's protest.
	No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet (1)) (July1998)

International application No. PCT/SE02/01378

This international Searching Authority found multiple inventions in this international application, as follows:

- 1. Claim 1a completely and parts of claims 2-3, 5, 8, 10, 12 and 28-34, a method of analysing circularised nucleic acid by directly detecting concatemeric amplification product of said nucleic acid.
- 2. Claims 1b and 13-27 completely and parts of claims 2-3, 5, 8, 10, 12, and 28-34, a method of analysing circularised nucleic acid by carrying out a further signal generating reaction on a concatemeric amplification product of said nucleic acid. Said invention may at a further search be found to relate to two separate inventive concepts.
- 3. Claims 1c, 4, 6-7, 9, 11 completely and parts of claims 2-3, 5, 8, 10, 12, and 28-34, a method of analysing circularised nucleic acid by monomerising a concatemeric amplification product of said nucleic acid before analysing said product.

According to Article 34(3)(a-c) and Rule 13.2, an international application shall relate to one invention only or to a group of inventions linked by one or more of the same or corresponding "special technical features", i.e. features that define a contribution which each of the inventions makes over the prior art.

Direct detection of concatemeric amplification product of circularised nucleic acid is known in the art, see e.g. US5854033. Consequently, analysis of circularised nucleic acid by concatemeric amplification of said nucleic acid is known in the art, no other technical feature unifying the three invention have been found.

Invention 1 has been searched.

International application No.
PCT/SE 02/01378

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